



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-7415; Directorate Identifier 2015-SW-076-AD; Amendment 39-18786; AD 2017-02-07]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH (Airbus Helicopters) Model MBB-BK 117 C-2 and MBB-BK 117 D-2 helicopters. This AD requires inspections and a torque of certain attachment points. This AD was prompted by a design reassessment. These actions are intended to prevent an unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>.

You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-7415.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-7415; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) ADs, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Matt Fuller, Senior Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email [matthew.fuller@faa.gov](mailto:matthew.fuller@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

On June 21, 2016, at 81 FR 40203, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model MBB-BK 117 C-2 and MBB-BK 117 D-2 helicopters with a hydraulic module plate assembly part number B291M0003103

with a single locking attachment point (attachment point) installed. The NPRM proposed to require performing repetitive visual inspections of each attachment point of the hydraulic module plate assembly for a crack and proper installation and a one-time torque of the nuts of each attachment point. The proposed requirements were intended to prevent failure of an attachment point, which could result in loss of the hydraulic module plate and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2015-0210R1, Revision 1, dated October 28, 2015, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for the Airbus Helicopters Model MBB-BK117 C-2, MBB-BK117 C-2e, MBB-BK117 D-2, and MBB-BK117 D-2m helicopters. EASA advises that the hydraulic plate assembly on certain MBB-BK117 models has four attachment points on the fuselage secured by a single locking mechanism. According to EASA, a design reassessment revealed stiffness of the hydraulic plate may be insufficient to withstand the in-service loads in the event one of the four single locking attachment points fails. EASA states that if this condition is not detected and corrected, it may lead to loss of the hydraulic module plate and possible loss of control of the helicopter. Therefore, the EASA AD requires a repetitive inspection and one-time torque tightening of the attachment points in accordance with Airbus Helicopters' service information. EASA considers its AD an interim action and states further AD action may follow.

After we issued the NPRM, EASA revised its AD and issued EASA AD No. 2015-0210R2, Revision 2, dated December 2, 2016. AD 2015-0210R2 reduces the applicability by serial number to exclude helicopters with an improved hydraulic module plate installation that is not subject to the unsafe condition.

## **Comments**

After our NPRM was published, we received comments from one commenter.

## **Request**

Airbus Helicopters requested revising the statements regarding what prompted this AD action and the intended effects of this AD action to more accurately describe the unsafe condition. Specifically, the commenter requested we state the design assessment showed that in case of a failure of a single attachment point, the stiffness of the hydraulic plate installation may be insufficient to withstand the in-service loads.

We agree. We have revised this statement in the Discussion paragraph of this Final Rule.

The commenter also requested that in our statement of what the proposed actions are intended to prevent, we change “subsequent loss of control of the helicopter” to “possible loss of control of the helicopter.”

We disagree. This AD states the unsafe condition “could result” in loss of the hydraulic module plate and subsequent loss of control of the helicopter. This language indicates that loss of control of the helicopter is a possibility. Thus, the requested change is unnecessary.

## **FAA’s Determination**

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or

develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed except for the change to the Applicability section previously described. This change is consistent with the intent of the proposals in the NPRM and will not increase the economic burden on any operator nor increase the scope of this AD.

#### **Differences Between this AD and the EASA AD**

The EASA AD requires contacting Airbus Helicopters customer support when replacing affected parts, and this AD does not.

#### **Related Service Information Under 1 CFR part 51**

We reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003 for Model MBB-BK 117 C-2 helicopters and Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001 for Model MBB-BK 117 D-2 helicopters, both Revision 0, and both dated October 12, 2015. This service information specifies a repetitive visual inspection for condition and correct installation of the attachment points, and if there is a crack, replacing the affected parts and contacting Airbus Helicopters customer support. This service information also specifies a tightening torque check after the initial inspection and, if torque cannot be applied, replacing the affected parts and contacting Airbus Helicopters customer support.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Other Related Service Information**

We also reviewed Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003

for Model MBB-BK 117 C-2 helicopters and Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001 for Model MBB-BK 117 D-2 helicopters, both Revision 1 and both dated October 14, 2016. This service information specifies the same repetitive visual inspection for condition and correct installation of the attachment points except it reduces the applicability by serial number due to the introduction of a new locking design.

### **Costs of Compliance**

We estimate that this AD affects 134 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. We estimate the cost of labor at \$85 per work-hour. Visually inspecting the four attachment points will take about 0.75 work-hour for an estimated cost of \$64 per helicopter and \$8,576 for the U.S. fleet per inspection cycle. Inspecting the torque of the four attachment points will take about 0.25 work-hour for an estimated cost of \$21 per helicopter and \$2,814 for the U.S. fleet. Replacing any of the attachment point parts will take a minimal amount of time and parts will cost about \$48 per attachment point.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2017-02-07 **Airbus Helicopters Deutschland GmbH**: Amendment 39-18786; Docket No. FAA-2016-7415; Directorate Identifier 2015-SW-076-AD.

#### **(a) Applicability**

This AD applies to Model MBB-BK 117 C-2 helicopters, serial numbers up to and including 9750, and Model MBB-BK 117 D-2 helicopters, serial numbers up to and including 20110, with a hydraulic module plate assembly part number B291M0003103 with a single locking attachment point installed, certificated in any category.

#### **(b) Unsafe Condition**

This AD defines the unsafe condition as failure of a hydraulic module plate assembly attachment point (attachment point). This condition could result in loss of the hydraulic module plate and subsequent loss of control of the helicopter.

#### **(c) Effective Date**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.



**(e) Required Actions**

(1) Within 100 hours time-in-service (TIS):

(i) Visually inspect the split pins, castellated nuts, plugs, nuts, and hexagon bolts of each attachment point for a crack and for proper installation by following the Accomplishment Instructions, paragraphs 3.B.1.2.a. through 3.B.1.2.e., of Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003, Revision 0, dated October 12, 2015 (ASB MBB-BK117 C-2-29A-003), or Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001, Revision 0, dated October 12, 2015 (ASB MBB-BK117 D-2-29A-001), as applicable to your model helicopter. Replace any part that has a crack before further flight. If the split pins, castellated nuts, or hexagon bolts are not as depicted in Figure 2 of ASB MBB-BK117 C-2-29A-003 or ASB MBB-BK117 D-2-29A-001, before further flight, properly install them.

(ii) Apply a torque of 9 to 10 Nm to the left-hand and right-hand nuts of each attachment point. If a torque of 9 to 10 Nm cannot be applied, replace the affected nut before further flight.

(2) Thereafter, at intervals not to exceed 400 hours TIS, perform the inspection in paragraph (e)(1)(i) of this AD.

**(f) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

(1) Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003 and Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001, both Revision 1, and both dated October 14, 2016, which are not incorporated by reference, contain additional information about the subject of this final rule. For service information identified in this final rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2015-0210R1, Revision 1, dated October 28, 2015, and EASA AD No. 2015-0210R2, Revision 2, dated December 2, 2016. You may view the EASA ADs on the Internet at <http://www.regulations.gov> in Docket No. FAA-2016-7415.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 2900, Hydraulic Power System.

**(i) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Airbus Helicopters Alert Service Bulletin No. ASB MBB-BK117 C-2-29A-003, Revision 0, dated October 12, 2015.

(ii) Airbus Helicopters Alert Service Bulletin No. ASB MBB-BK117 D-2-29A-001, Revision 0, dated October 12, 2015.

(3) For Airbus Helicopters service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on January 18, 2017.

Lance T. Gant,

Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

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